CLAIMS

What is claimed is:

5

10

15

A logical device for handling dynamic attributes in a static directory comprising:

 a set of attribute declarations containing at least one declaration

for an attribute to be handled as a dynamic attribute;

at least one Real-time Attribute Processor (RTAP) configured to determine a dynamic value for an attribute declared as being dynamic in said set of attribute declarations;

an RTAP selector configured to select and invoke an RTAP according to a predetermined selection schema; and

a directory attribute processor configured to parse requests for access to directory attribute values, to detect requests for attributes declared as dynamic in said attribute declarations, to operate said RTAP selector to invoke a corresponding RTAP, to receive an attribute value determined by said invoked RTAP, and to return said attribute value to a requester.

2. The logical device as set forth in Claim 1 wherein said directory attribute processor is further adapted to suppress storage of said attribute value in a directory.

20

PATENT APPLICATION

- 3. The logical device as set forth in Claim 1 wherein said RTAP selector is adapted to select an RTAP based upon a variation of a name of said requested directory attribute.
- The logical device as set forth in Claim 3 wherein said name variation comprises a name identifying a function selected from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.
- The logical device as set forth in Claim 1 wherein said RTAP comprises a function selected from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.
- 15 6. The logical device as set forth in Claim 1 wherein said RTAP and said directory attribute processor are configured to handle Lightweight Directory Access Protocol requests for attribute values.

7. The logical device as set forth in Claim 1 wherein said directory attribute
20 processor is configured to disallow attribute modify requests for attributes

PATENT APPLICATION

. . . .

declared as dynamic.

8. A method for handling dynamic attributes in a static directory server comprising: providing at least one declaration for an attribute to be handled as a dynamic attribute in association with a set of directory attribute declarations; parsing requests for access to directory attribute values to detect requests

for attributes declared as dynamic in said attribute declarations;

invoking at least one Real-time Attribute Processor (RTAP) selected according to a predetermined selection schema, said RTAP being configured to determine a dynamic value for an attribute declared as being dynamic in said set of attribute declarations, said dynamic value being unavailable from said static directory; and

returning to a requester an attribute value determined by said invoked RTAP.

15

9. The method as set forth in Claim 8 wherein said step of selecting and invoking a RTAP selector comprises selecting an RTAP based upon a variation of a name of said requested directory attribute.

20

5

10

PATENT APPLICATION

10. The method as set forth in Claim 9 wherein said step of selecting an RTAP based upon an attribute name variation comprises selecting an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

5

11. The method as set forth in Claim 8 wherein said step of invoking an RTAP comprises invoking an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

10

12. The method as set forth in Claim 8 wherein said step of parsing a request comprises parsing a Lightweight Directory Access Protocol requests for attribute values.

15 13. The method as set forth in Claim 8 wherein said step of returning to a requester an attribute value comprising returning said value according to a Lightweight Directory Access Protocol.

PATENT APPLICATION

11 2.3

14. A computer-readable medium encoded with software for handling dynamic attributes in a static directory server, said software performing the steps comprising:

providing at least one declaration for an attribute to be handled as a dynamic attribute in association with a set of directory attribute declarations;

parsing requests for access to directory attribute values to detect requests for attributes declared as dynamic in said attribute declarations;

invoking at least one Real-time Attribute Processor (RTAP) selected according to a predetermined selection schema, said RTAP being configured to determine a dynamic value for an attribute declared as being dynamic in said set of attribute declarations, said dynamic value being unavailable from said static directory; and

returning to a requester an attribute value determined by said invoked RTAP.

15

5

10

15. The medium as set forth in Claim 14 wherein said software for selecting and invoking an RTAP selector comprises software for selecting an RTAP based upon a variation of a name of said requested directory attribute.

PATENT APPLICATION

- 16. The medium as set forth in Claim 15 wherein said software for selecting an RTAP based upon an attribute name variation comprises software for selecting an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.
- 17. The medium as set forth in Claim 14 wherein said software for invoking an RTAP comprises software for invoking an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.
- 18. The medium as set forth in Claim 14 wherein said software for parsing a request comprises software for parsing a Lightweight Directory Access Protocol requests for attribute values.
- 19. The medium as set forth in Claim 14 wherein said software for returning to a requester an attribute value comprising software for returning said value according to a Lightweight Directory Access Protocol.

5

10

15 ...